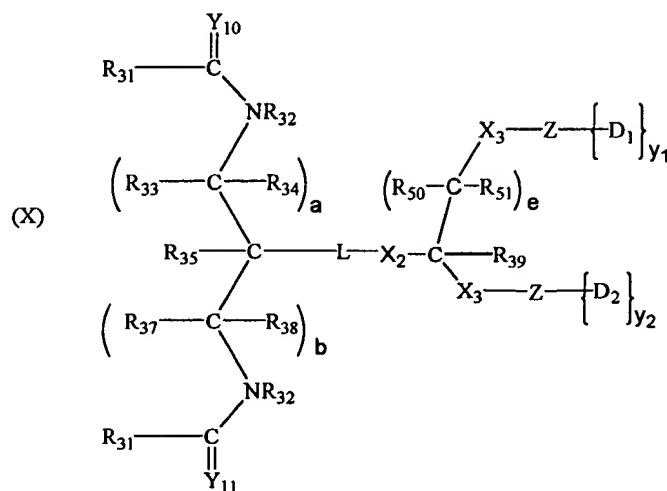


**WE CLAIM:**

1. A compound of the formula:



wherein:

$\text{R}_{31}$  is a linear or branched polymer residue;

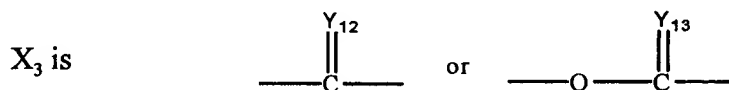
$\text{Y}_{10}$  and  $\text{Y}_{11}$  are independently O, S, or  $\text{NR}_{40}$ ;

$\text{X}_2$  is O, S or  $\text{NR}_{41}$ ;

$\text{R}_{32}$ ,  $\text{R}_{33}$ ,  $\text{R}_{34}$ ,  $\text{R}_{35}$ ,  $\text{R}_{37}$ ,  $\text{R}_{38}$ ,  $\text{R}_{39}$ ,  $\text{R}_{40}$ ,  $\text{R}_{41}$ ,  $\text{R}_{50}$  and  $\text{R}_{51}$  are independently selected from the group consisting of hydrogen,  $\text{C}_{1-6}$  alkyls,  $\text{C}_{3-12}$  branched alkyls,  $\text{C}_{3-8}$  cycloalkyls,  $\text{C}_{1-6}$  substituted alkyls,  $\text{C}_{3-8}$  substituted cycloalkyls, aryls, substituted aryls, aralkyls,  $\text{C}_{1-6}$  heteroalkyls and substituted  $\text{C}_{1-6}$  heteroalkyls;

$a$ ,  $b$  and  $e$  are each independently a positive integer;

L is an amino acid residue or a bifunctional linker;



wherein  $\text{Y}_{12}$  and  $\text{Y}_{13}$  are independently O, S, or  $\text{NR}_{41}$ ;

Z is selected from the group consisting of a bond, a moiety that is actively transported into a target cell, a hydrophobic moiety, and combinations thereof;

$\text{D}_1$  and  $\text{D}_2$  are independently selected from the group consisting of OH, a

residue of a hydroxyl-containing moiety, a residue of an amine-containing moiety and a leaving group; and

$y_1$  and  $y_2$  are independently selected positive integers.

2. The compound of claim 1, wherein  $Y_1$  and  $Y_2$  are O.

3. The compound of claim 1, wherein  $R_2$ ,  $R_3$ ,  $R_4$ ,  $R_7$ ,  $R_8$  and  $R_9$  are H.

4. The compound of claim 1, wherein  $m$  and  $n$  are both 1.

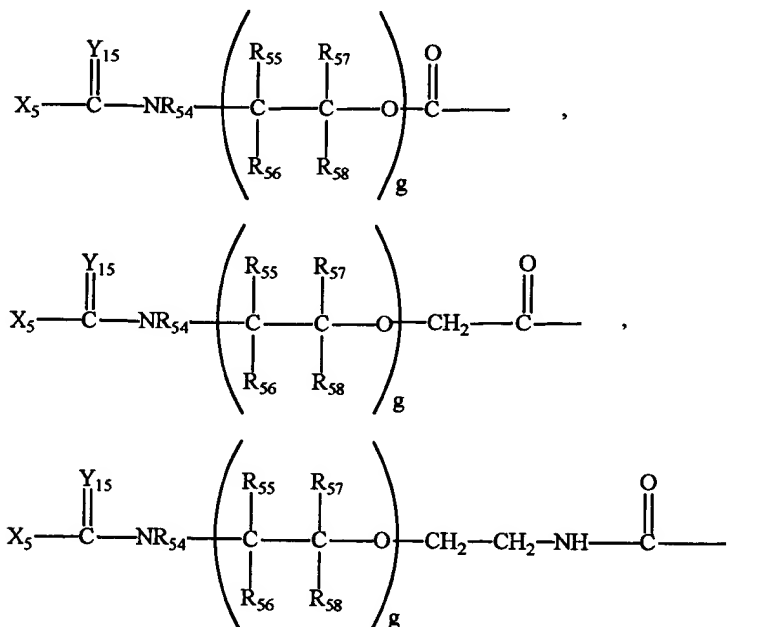
5. The compound of claim 1, wherein  $R_1$  is  $O-(CH_2CH_2O)_x$  or  $O-(CH(CH_3)CH_2O)_x$ , wherein  $x$  is the degree of polymerization.

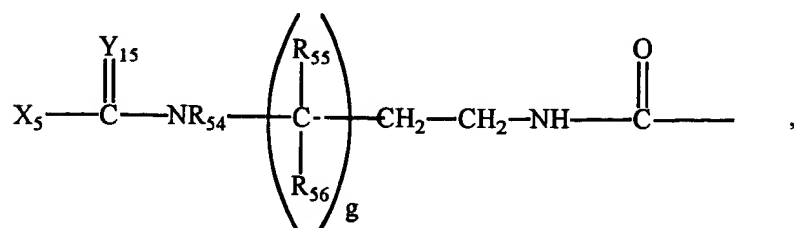
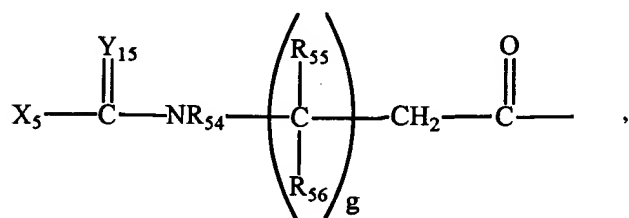
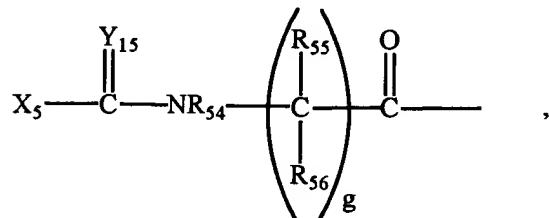
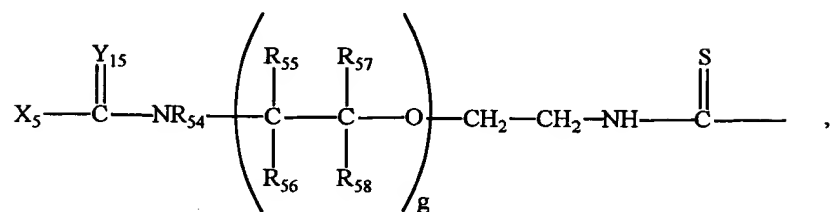
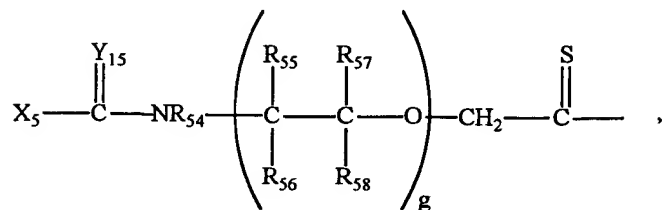
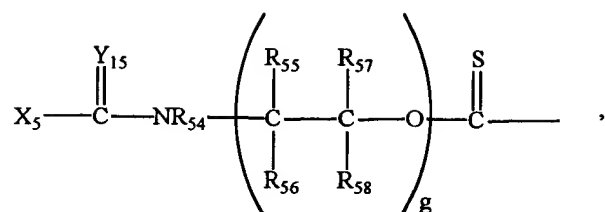
6. The compound of claim 5, wherein  $R_1$  is  $O-(CH_2CH_2O)_x$  and  $x$  is a positive integer selected so that the weight average molecular weight is at least about 20,000.

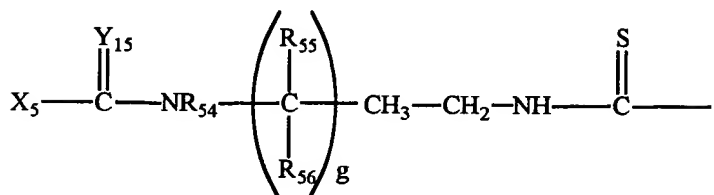
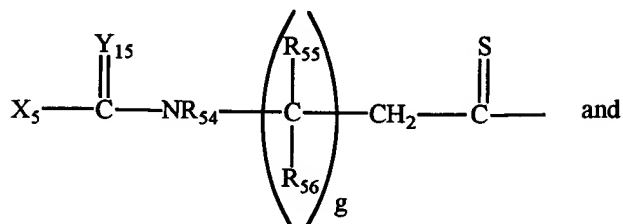
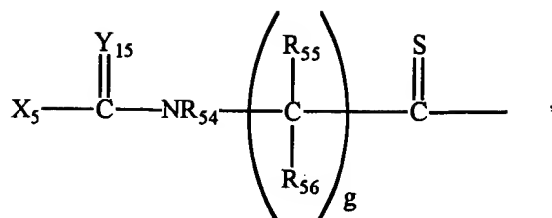
7. The compound of claim 6, wherein  $R_1$  has a weight average molecular weight of from about 20,000 to about 100,000.

8. The compound of claim 7, wherein  $R_1$  has a weight average molecular weight of from about 25,000 to about 60,000.

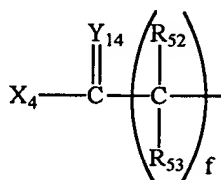
9. The compound of claim 1 wherein  $L$  is selected from the group consisting of:







10. The compound of claim 1 wherein L is an amino acid residue of the formula:



wherein  $X_4$  is O, S or  $\text{NR}_{42}$ ;

$Y_{14}$  is independently O, S, or  $\text{NR}_{45}$ ;

$R_{42}$ ,  $R_{45}$  and  $R_{52}$ -  $R_{53}$  are independently selected from the group consisting of hydrogen,  $\text{C}_{1-6}$  alkyls,  $\text{C}_{3-12}$  branched alkyls,  $\text{C}_{3-8}$  cycloalkyls,  $\text{C}_{1-6}$  substituted alkyls,  $\text{C}_{3-8}$  substituted cycloalkyls, aryls, substituted aryls, aralkyls,  $\text{C}_{1-6}$  heteroalkyls and substituted  $\text{C}_{1-6}$  heteroalkyls; and

$f$  is a positive integer.

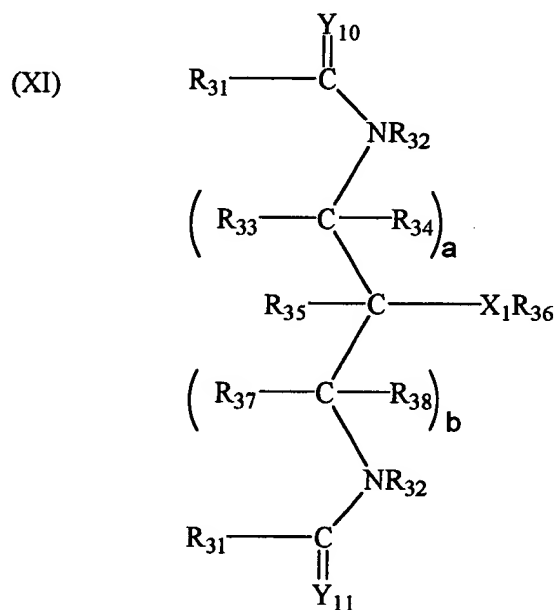
11. The compound of claim 1 wherein  $D_1$  and  $D_2$  are residues of an

active biological agent, an anticancer prodrug, a detectable tag, and combinations thereof.

12. The compound of claim 11 wherein the anticancer agent or anticancer prodrug is selected from the group consisting of daunorubicin, doxorubicin, p-aminoaniline mustard, melphalan, cytosine arabinoside, gemcitabine, and combinations thereof.

13. The compound of claim 1 wherein at least one D moiety is a leaving group selected from the group consisting of as N-hydroxybenzotriazolyl, halogen, N-hydroxy-phthal-imidyl, p- nitrophenoxy, imidazolyl, N-hydroxysuccinimidyl, thiazolidinyl thione, and combinations thereof.

14. A compound of the formula:



wherein:

$\text{R}_{31}$  is a linear or branched polymer residue;

$\text{Y}_{10}$  and  $\text{Y}_{11}$  are independently O, S, or  $\text{NR}_{40}$ ;

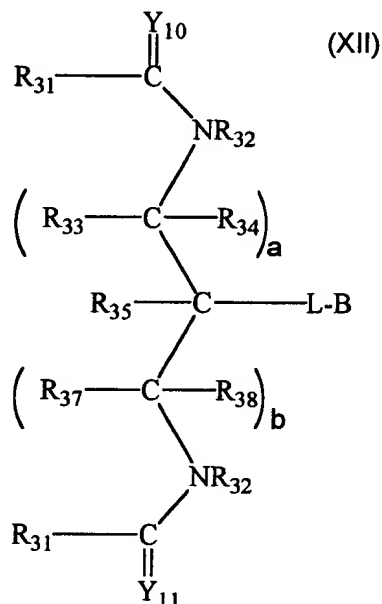
$\text{X}_1$  is O, S or  $\text{NR}_{41}$ ;

$\text{R}_{32}$ ,  $\text{R}_{33}$ ,  $\text{R}_{34}$ ,  $\text{R}_{35}$ ,  $\text{R}_{36}$ ,  $\text{R}_{37}$ ,  $\text{R}_{38}$ ,  $\text{R}_{40}$  and  $\text{R}_{41}$  are independently selected from the group consisting of hydrogen,  $\text{C}_{1-6}$  alkyls,  $3-12$  branched alkyls,  $\text{C}_{3-8}$  cycloalkyls,

C<sub>1-6</sub> substituted alkyls, C<sub>3-8</sub> substituted cycloalkyls, aryls, substituted aryls, aralkyls, C<sub>1-6</sub> heteroalkyls and substituted C<sub>1-6</sub> heteroalkyls; and

*a* and *b* are each independently a positive integer.

15. A method of preparing a polymeric conjugate, comprising reacting a compound of the formula (XII)



wherein

R<sub>31</sub> is a linear or branched polymer residue;

Y<sub>10</sub> and Y<sub>11</sub> are independently O, S, or NR<sub>40</sub>;

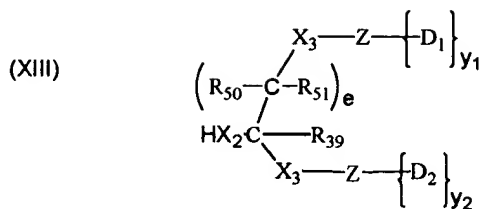
L is an amino acid residue or a bifunctional linker;

R<sub>32</sub>, R<sub>33</sub>, R<sub>34</sub>, R<sub>35</sub>, R<sub>37</sub>, R<sub>38</sub>, and R<sub>40</sub> are independently selected from the group consisting of hydrogen, C<sub>1-6</sub> alkyls, C<sub>3-12</sub> branched alkyls, C<sub>3-8</sub> cycloalkyls, C<sub>1-6</sub> substituted alkyls, C<sub>3-8</sub> substituted cycloalkyls, aryls, substituted aryls, aralkyls, C<sub>1-6</sub> heteroalkyls and substituted C<sub>1-6</sub> heteroalkyls;

*a* and *b* are each independently a positive integer, and

B is a leaving group;

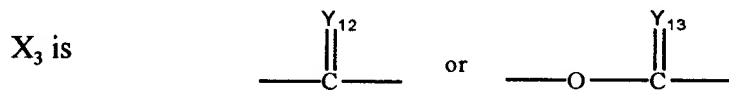
with a compound of the formula (XIII)



wherein

$\text{X}_2$  is O, S or  $\text{NR}_{41}$ ;

$\text{R}_{39}$ ,  $\text{R}_{41}$ ,  $\text{R}_{50}$  and  $\text{R}_{51}$  are independently selected from the group consisting of hydrogen,  $\text{C}_{1-6}$  alkyls,  $\text{C}_{3-12}$  branched alkyls,  $\text{C}_{3-8}$  cycloalkyls,  $\text{C}_{1-6}$  substituted alkyls,  $\text{C}_{3-8}$  substituted cycloalkyls, aryls, substituted aryls, aralkyls,  $\text{C}_{1-6}$  heteroalkyls and substituted  $\text{C}_{1-6}$  heteroalkyls;



wherein  $\text{Y}_{12}$  and  $\text{Y}_{13}$  are independently O, S, or  $\text{NR}_{41}$ ;

Z is selected from the group consisting of a bond, a moiety that is actively transported into a target cell, a hydrophobic moiety, and combinations thereof;

$\text{D}_1$  and  $\text{D}_2$  are independently selected from the group consisting of OH, a residue of a hydroxyl, a residue of an amine-containing moiety and a leaving group;

$e$  is a positive integer; and

$y_1$  and  $y_2$  are independently selected positive integers;

under conditions sufficient to cause a substitution reaction in which the compound of formula (X) is formed.

16. A method of treating mammals with polymeric conjugates, comprising administering an effective amount of the compound of claim 1.